

Write the Segment Addition Postulate for the points described.

1. S is between D and P

2. J is between S and H

If $DS = 4$ and $SP = 5$, then $DP =$ _____.

If $SJ = 5$ and $SH = 12$, then $JH =$ _____.

3. C is between Q and R

4. T is between M and N

If $QC = 2x$, $RC = 3x$, and $QR = 15$,
what is x ? _____

If $NT = x + 5$, $MN = 3x$, and $MT = 7$,
what is MN ? _____

In the diagram of collinear points, $GK = 24$, $HJ = 10$, and $GH = HI = IJ$.
Find each length.



5. HI _____

6. IJ _____

7. GH _____

8. JK _____

9. IG _____

10. IK _____

Find QR in the following problems.

11. If $RS = 44.6$ and $SQ = 68.4$, find QR .

12. If $RS = 33.4$ and $SQ = 80$, find QR .

In the following problems, suppose J is between H and K .

♦ Use the Segment Addition Postulate to solve for x .

♦ Then find the length of each segment.

13. $HJ = 5x$

14. $HJ = 2x + 5$

15. $HJ = 6x - 5$

$JK = 7x$

$JK = 3x - 7$

$JK = 4x - 6$

$KH = 96$

$KH = 18$

$KH = 129$

16. $HJ = 3x + 8$

17. $HJ = 4t - 15$

18. $HJ = 5p$

$JK = 4x + 6$

$JK = 5t - 6$

$JK = p$

$KH = 28$

$KH = 15$

$KH = 3$